What is claim d is:

1. A pixel for an in-plane switching liquid crystal display, comprising:

a first structure on a substrate having a reflective surface with a nanometer scale roughness for light scattering and contrast enhancement;

a second structure on a first part of the first structure having a switch device thereof;

a liquid crystal layer above the second structure and a second part of the first structure; and

a third structure on the liquid crystal layer.

2. The pixel of claim 1, wherein the first structure comprises:

a micro scattering layer on the substrate with the nanometer scale roughness; and

a reflective layer made of high reflective metal on the micro scattering layer and conformal to the micro scattering layer to thereby form the reflective surface.

3. The pixel of claim 2, wherein the micro scattering layer comprises:

a conductor on the substrate; and

an insulator on the conductor with the nanometer scale

roughness.

4. The pixel of claim 2, wherein the micro scattering layer comprises:

a layer of crystalline seeds; and

an insulator on the layer of crystalline seeds with the nanometer scale roughness.

5. The pixel of claim 1, wherein the second part comprises a plurality of reflectors having the reflective surface with the nanometer scale roughness.

6. The pixel of claim 5, wherein the plurality of reflectors are bent.

7. The pixel of claim 1, wherein the third structure comprises:

a color filter;

a scattering film between the color filter and the liquid crystal layer; and

a polarizer above the color filter.

8. The pixel of claim 1, wherein the first structure further comprises a transparent region having a first area, and the second part comprises a second area of the reflective surface, with

an area ratio of the first area to the second area ranged between 10% and 400%.

9. A method of forming a pixel for an in-plane switching liquid crystal display, comprising the steps of:

forming a first structure on a substrate having a reflective surface with a nanometer scale roughness;

selectively etching the first structure for forming a first part and a second part;

forming a second structure on the first part for forming a switch device thereof;

arranging a liquid crystal layer above the second structure and the second part; and

arranging a third structure on the liquid crystal layer.

10. The method of claim 9, wherein the step of forming a first structure comprises the steps of:

forming a micro scattering layer on the substrate; and

forming a reflective layer with a high reflectivity on the micro scattering layer.

11. The method of claim 10, wherein the step of forming a micro scattering layer comprises the steps of:

forming a conductor on the substrate; and

depositing an insulator on the conductor having a top

surface with the nanometer scale roughness.

12. The method of claim 10, wherein the step of forming a micro scattering layer comprises forming an insulator having a top surface with the nanometer scale roughness.

13. The method of claim 10, wherein the step of forming a micro scattering layer comprises the steps of:

forming a layer of crystalline seeds; and

forming an insulator on the layer of crystalline seeds with the nanometer scale roughness.

14. The method of claim 13, wherein the step of forming an insulator comprises high temperature crystallization.

15. The method of claim 9, wherein the step of forming a second part comprises forming a plurality of reflectors having the reflective surface with the nanometer scale roughness.

16. The method of claim 9, wherein the step of forming a second part comprises forming a plurality of bent reflectors having the reflective surface with the nanometer scale roughness.

17. The method of claim 9, wherein the step of

forming a third structure comprises the steps of:

forming a scattering film;

forming a color filter on the scattering film; and

forming a polarizer on the color filter.

18. A bottom plate for a pixel of an in-plane switching liquid crystal display, comprising:

a substrate;

a thin film transistor on the substrate;

a plurality of reflectors each including:

a micro scattering layer having a top surface with the nanometer scale roughness; and

a reflective layer on the micro scattering layer and conformal to the top surface to thereby form a reflective surface, wherein the reflective layer is made of a same metal of forming a gate of the thin film transistor;

a passivation covered on the plurality of reflectors; and

a conductor on the passivation and passing therethrough for connected to one of the plurality of reflectors.

19. The bottom plate of claim 18, wherein the micro scattering layer comprises:

a conductor; and

an insulator on the conductor having the top surface with

the nanometer scale roughness.

20. The bottom plate of claim 18, wherein the micro scattering layer comprises an insulator having the top surface with the nanometer scale roughness.

21. The bottom plate of claim 18, wherein the micro scattering layer comprises:

a layer of crystalline seeds; and

an insulator on the layer of crystalline seeds having the top surface with the nanometer scale roughness.

22. The bottom plate of claim 18, further comprising a transparent region having a first area, and the plurality of reflectors having the top surface of a second area in total, with an area ratio of the first area to the second area ranged between 10% and 400%.